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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,242	10/22/2001	Nicolaas Van Der Blom	NVBI-BQ16	8832

7590 .03/31/2005

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EXAMINER

LOPEZ, FRANK D

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

JP

Office Action Summary	Application No.	Applicant(s)	
	10/030,242	VAN DER BLOM, NICOLAAS	
	Examiner	Art Unit	
	F. Daniel Lopez	3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on December 30, 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 104-126 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 108-110 is/are allowed.
- 6) ☒ Claim(s) 104-107 and 111-126 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Applicant's arguments filed December 30, 2004, have been fully considered but they are not deemed to be persuasive.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

Claims 114-125 and are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 114 line 3 and claim 119 line 3 "means for engaging the piston", claim 119 line 4 "means for introducing fluid into the chamber...", claims 118 and 122 line 2 "means for biasing the piston" and claim 124 line 3-4 "means for combusting..." are means plus function limitations, which invokes the 112, 6th paragraph. As such, the specification must specifically define what elements are included in the means. Since it does not, these claims are indefinite, since it is unclear what elements are included as part of these means.

Claims not specifically mentioned are indefinite, since they depend from one of these claims.

Claim Rejections - 35 USC § 101

Claim 124 is rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. Claim 124 claims a combustible fluid introduced into the chamber and means for combusting the combustible fluid, which indicates that the piston is heated by the combusted fluid; but there is no indication that the sealing portion of the piston (i.e. the elastomeric member 25) can withstand the temperature of a combusted fluid.

Claim Rejections - 35 USC § 102

Claims 104-106, 119-123 and 126 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Langas. The O-ring seals (24, 28) of the piston (14) are elastically deformable material.

Claims 104-106 and 111-116 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by either British 2,023,715 or British 2,070,731. The limitation "A shock absorber" of claims 114-116 is considered intended use, since there is no limitation limiting the claimed invention to a shock absorber.

Claims 104-106 and 114-118 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Schmidt et al.

Claims 104-107 and 114-118 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Fabel et al.

Claims 104-107, 119 and 123 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Stubin (see discussion below).

Claim Rejections - 35 USC § 103

Claims 124 and 125 are rejected under 35 U.S.C. § 103 as being unpatentable over Stubin. Stubin discloses a actuator comprising chamber (2) having different cross sectional areas at first and second longitudinal positions, with substantially continuously different cross sectional areas between the first and second positions; a piston including sealing means (10) supported by a piston body (6), with the piston body designed to adapt itself to the different cross sectional areas during longitudinal movement; a piston rod (1a) engaging the piston from outside the chamber and means for introducing fluid, resulting form combustion of a combustible fluid, into the chamber to displace the piston between the first and second positions; but does not disclose that the combustible fluid is introduced into the chamber, with means for combusting the fluid; or that the movement of the piston rotates a crank.

Official notice is taken that it is well known to use a combustion type piston cylinder to rotate a crank. It would have been obvious at the time the invention was made to one having ordinary skill in the art to use the combustion type piston cylinder of Stubin to rotate a crank, as a matter of engineering expediency.

Official notice is taken that it is well known to introduce a combustible fluid into a chamber, with means for combusting the fluid, as an alternative to introducing fluid, resulting form combustion of a combustible fluid, into the chamber. It would have been

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obvious at the time the invention was made to one having ordinary skill in the art to introduce the combustible fluid into the chamber of Stubin, with means for combusting the fluid in the chamber, as a matter of engineering expediency.

Conclusion

Claims 108-110 are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is (571)-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is (703) 872-9306. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.



F. Daniel Lopez
Primary Examiner
Art Unit 3745
March 28, 2005